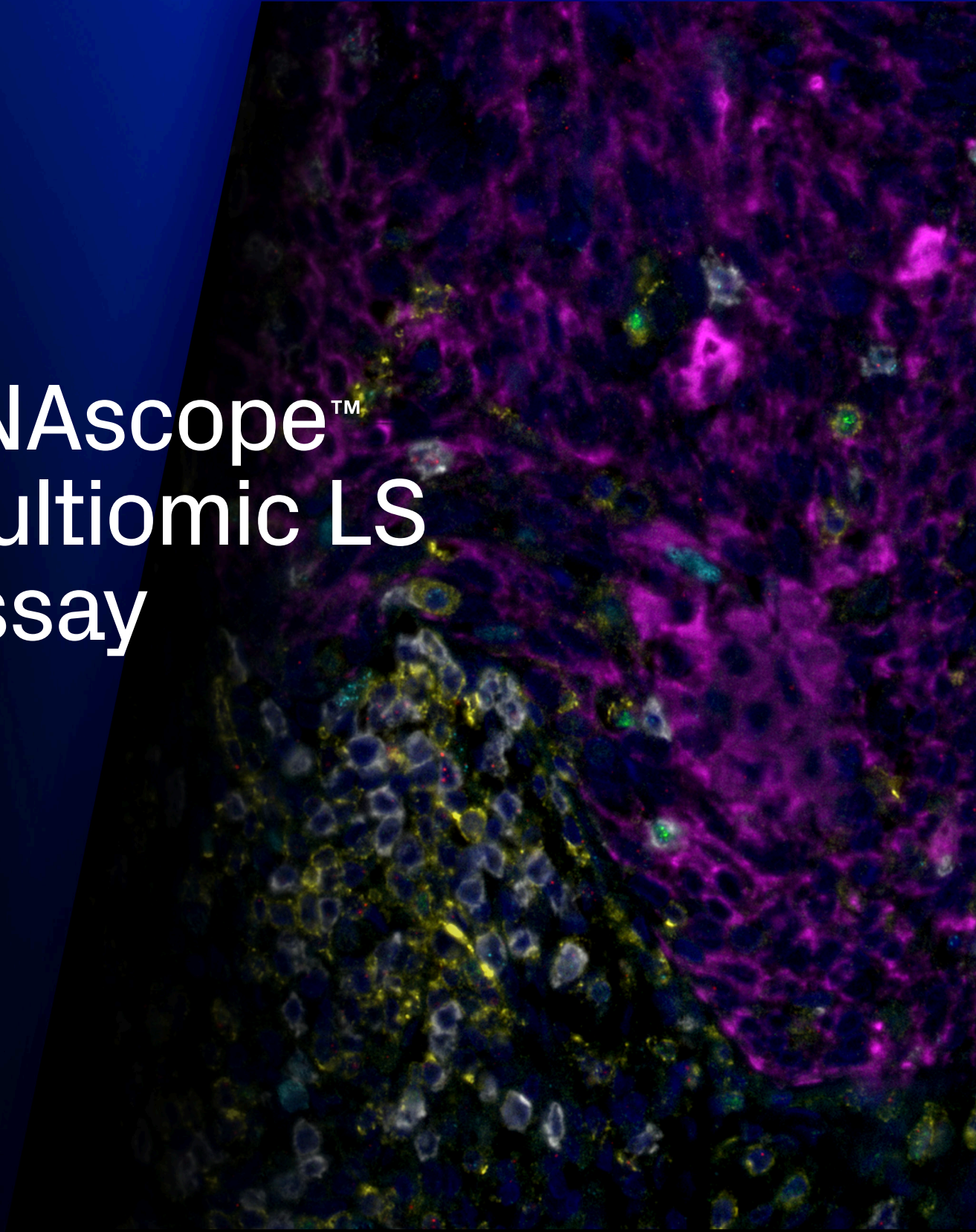
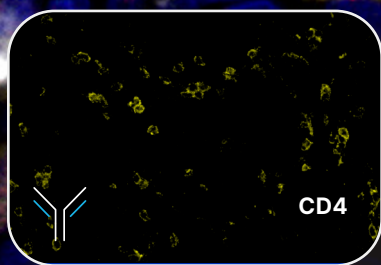


# RNAscope™ Multiomic LS Assay

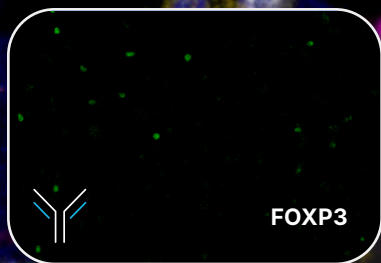




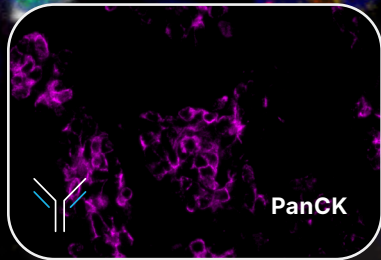
CD4



CD8



FOXP3



PanCK



GZMB



IFNG

#### Human Cervical Cancer

**Figure 1. T cell infiltration in tumor tissue using pre-conjugated primary antibodies in cervical cancer tissue.** Cytotoxic T cell lymphocytes were detected using CD8, GZMB and IFNG expression. Regulatory T cells were detected using CD4, FOXP3 expression. PanCK was used as a tumor marker. Nuclei were stained using DAPI.

# Visualize cell phenotypes and function with **single-section spatial multiomics**.

The RNAscope™ Multiomic LS Assay enables highly sensitive and specific detection of both RNA and proteins in the same tissue section for a true multiomic spatial assay. With automation on the BOND RX, you can easily scale studies to achieve your project goals.

# 6

**RNA or  
Protein + RNA or  
Protein**



## **Optimized multiomic workflow**

- Robust RNAscope Multiplex TSA chemistry for both RNA and protein detection.
- Protease-free workflow preserves antigen integrity and tissue morphology.
- Same-slide H&E staining.



## **Gold-standard RNAscope detection**

- Proven performance for FFPE samples and high to low expressing target genes.
- Backed by 10K publications.
- Over 50K probes visualized.

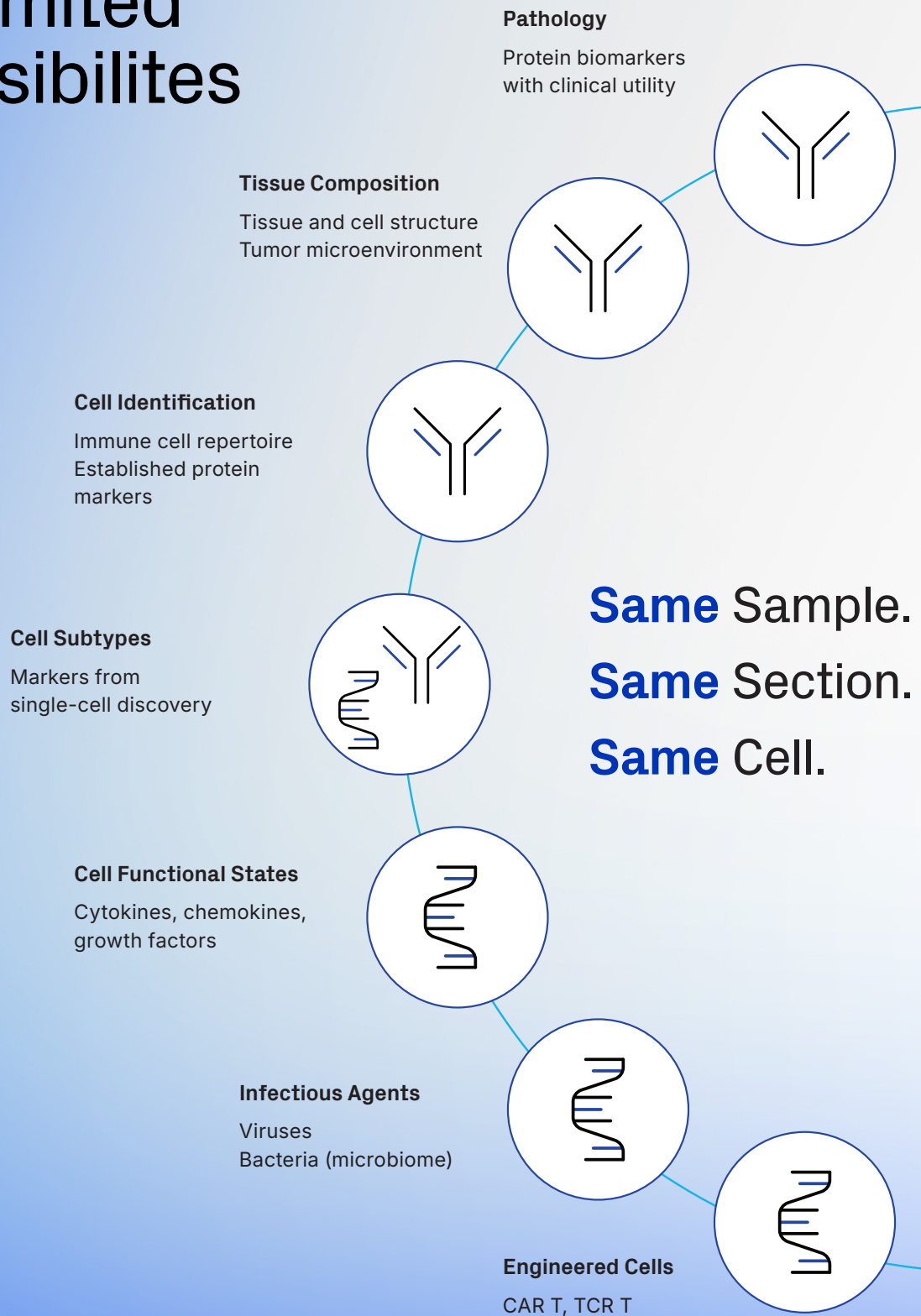


## **Fast and flexible assay design**

- Unlimited RNA targets. Any gene. Any species.
- Easily add up to 2 of your own unconjugated antibodies.
- Expand protein plex up to 6 with ready-to-use antibodies to immune markers.

On the cover: Human breast cancer tissue detected for CD4, CD8a, PanCK, and FoxP3 proteins and for interferon gamma and granzyme B transcripts.

# Unlimited Possibilities



# Fast and flexible assay design

Get answers quickly to achieve your project goals.

## Oncology and Immuno-oncology

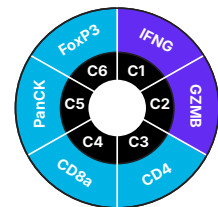
Easily combine up to 4 pre-conjugated antibodies for common targets highlighting tumor infiltrating lymphocytes (TIL) or other human protein targets with your own unconjugated primary antibodies or RNA probes to interrogate the tumor microenvironment



CD4  
CD8  
FoxP3  
PanCK

+

Any 2  
Proteins  
or RNAs

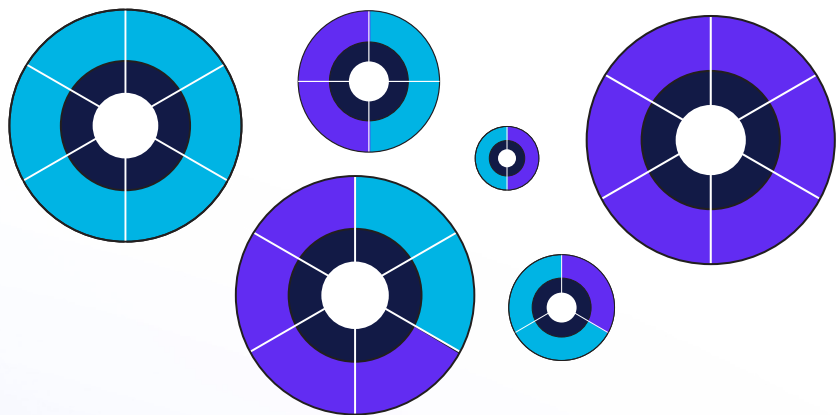


Common RNA markers include:

CAR-T | Checkpoints | Cytokines & Chemokines |  
Activation & Exhaustion

## Mix and match for unlimited flexibility

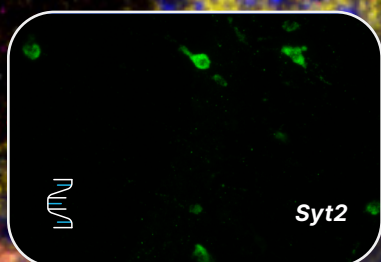
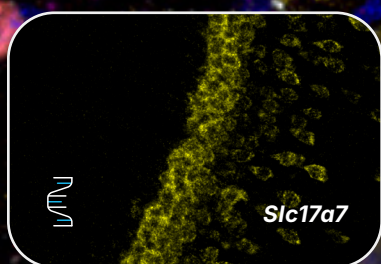
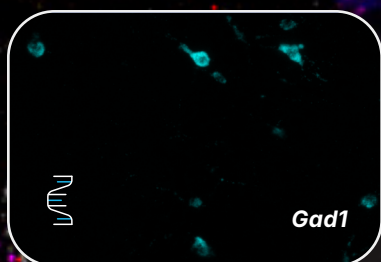
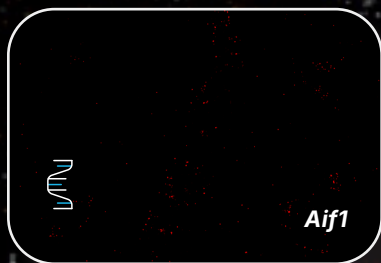
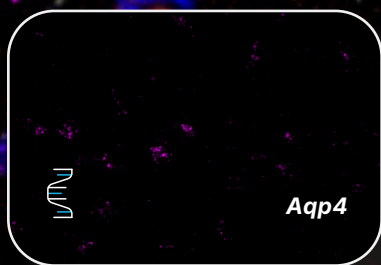
Select up to 6 RNA targets or easily combine both protein and RNA targets in **3 simple steps**. Designing panels is easy, just select the number of markers you need to achieve your goal.



**1** Start with up to 2 of your own primary antibodies raised in mouse and rabbit and use with available secondaries.

**2** Add up to 4 pre-conjugated antibodies.  
CD4 | CD 8 | FoxP3 |  
PanCK

**3** Add RNA markers in open channels.



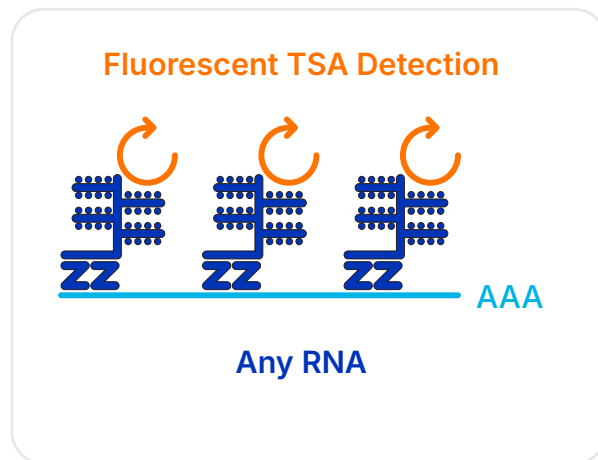
### Mouse Hippocampus

**Figure 2. Detection of resident hippocampal cell types using 6-plex RNA panel in fresh frozen mouse brain.** Simultaneous detection of a panel of 6 target RNA (*Gad1*, *Slc17a7*, *Aif1*, *Aqp4*, *Syt2*) in fresh frozen mouse brain tissue. Nuclei were stained with DAPI.

# Specific and Sensitive

## Developed using RNAscope technology

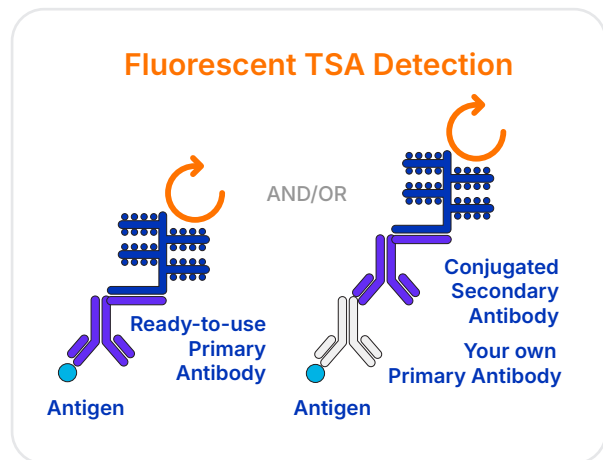
### RNA Detection



### RNAscope Chemistry

Visualize RNAs with RNAscope Multiplex v2 detection technology. RNA-specific target probes designed using proprietary double ZZ technology are amplified using RNAscope technology followed by fluorescent TSA detection.

### Protein Detection



### New Capability

Visualize proteins using ready-to-use pre-conjugated primary antibodies or your own unconjugated primary antibodies together with available pre-qualified secondary antibodies. Antibodies are detected using RNAscope amplification reagents followed by fluorescent TSA detection.

## Getting Started is easy.

Access this new capability using RNAscope Professional Assay Services or reserve your kit today for use on the BOND RX.



**Contact us to get first access to this exciting new assay!**

<https://info.bio-techne.com/MultiomicsLS.html>



Global Developer, Manufacturer, and Supplier of High Quality Reagents,  
Analytical Instruments, and Precision Diagnostics

**INCLUDES** R&D Systems™ Novus Biologicals™ Tocris Bioscience™ ProteinSimple™ ACD™ ExosomeDx™ Asuragen® Lunaphore™

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